

REMARKS

Claims 1-4, 6, 7, and 9-17 are currently pending.

It is respectfully submitted, for the reasons stated below, that amended claim 1 is allowable and is generic to the species represented by claim 10, as indicated in the response of September 25, 2002. Further, entry of this amendment is proper. Specifically, the recitations of claims 5 and 8 have been added to claim 1. Hence, the recitations of claim 1 have been examined, there being no change in scope from previous claim 8. Further, claim 8 was are indicated to be generic to all species, including claim 10. Accordingly, Applicants respectfully request that claim 10 be rejoined and allowed with the remaining claims. Applicants also respectfully request entry of these amendments insofar as they merely reflect the formal amendment of placing the recitations of examined claim 8 into independent form and adjusting the dependencies of several claims in light of this proposed change.

The final Office Action of April 29, 2003, includes a rejection of claims 1-6, 9 and 11-15 under 35 U.S.C. § 103 as allegedly being unpatentable over the Thony et al. patent (U.S. Patent No. 6,023,479) in view of the Wu et al. article (Wu et al., " $CO^{2+}:MgAl_2O_4$ Crystal Passive Q-Switches Performance at 1.34, 1.44 and 1.54 Micron" OSA TOPS, ASSL (Davos, Switzerland) pp. 254, (February 16, 2000)); and a rejection of claim 8 under 35 U.S.C. § 103 as allegedly being unpatentable over the Thony et al. patent in view of the Wu et al. article, and in further view of the Molva et al. patent (U.S. Patent No. 5,495,494). The recitations of claim 8 are proposed to be added to claim 1 (including

the recitations of intermediary claim 5) and therefore the first rejection will be rendered moot upon entry of these changes.

Claim 1, as proposed to be amended above, recites an arrangement, *inter alia*, wherein the chip of optically bleachable material is positioned closer to the diode laser than the chip of active material, in order for light emitted by the diode to pass through the bleachable material before entering the active material. The advantage of this embodiment is explained, for instance, at page 4, lines 5-12, of the present application. In this section, it is identified that in order to reduce the thermal load on the active material, pump light is preferably launched into the active material through the absorber bonded thereto. When the light is launched into the active material, a major part of this pump light is absorbed near the surface of the material. By having the material bonded to another material, in this case to an absorber, heat is transferred into the absorber and a cooling effect is achieved.

Accordingly, a reason for having such a placement of a thin absorber is that heat developed in the active material is transported away more easily, through the absorber, rather than through air.

With respect to claim 8, the Office suggests that an "ordinary artisan would have been motivated to modify Thony [to include an additional saturable absorber layer between the laser diode and the chip of active material] for the purpose of absorbing more energy from the pump beam. It is respectfully submitted that this statement is inaccurate.

The reason for having the absorber closest to the pump diode has nothing to do with absorbing more energy. According to the present disclosure, providing the absorber at the

location recited in claim 1, as presented above, is to give an improved thermal behavior by transporting away heat generated in the active material.

In light of the foregoing, Applicants respectfully request reconsideration and allowance of the above-captioned application.

Respectfully submitted,

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